

Exponent Rules:

Multiplication of exponents rule: $(x^2)(x^5)(x^3) = \underline{\hspace{2cm}}$

Division of exponents rule: $\frac{x^8}{x^5} = \underline{\hspace{2cm}}$

Zero exponent rule: $x^0 = \underline{\hspace{2cm}}$

Power to a Power rule: $(x^3)^5 = \underline{\hspace{2cm}}$

Negative exponent rule: $x^{-3} = \underline{\hspace{2cm}}$



Date: 4/29/10

Title: Connecting exponents to quadratics

Objective: To make connections between the **exponent rules** and with **quadratic functions**.

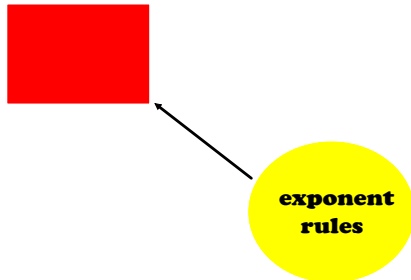
In: (W2L)

When it comes to the exponent rules,

I understand _____ the best because...

I have the hardest time with _____ because...

Concept Map



What is the connection between the rules?

WHAT I AM LOOKING FOR....

- All exponent rules must be included as nodes.
- All links must complete a connection.
- Connections must be made not only from the main node, but between nodes also!
- Examples must be included.
- Consider "pitfalls".



W2L:

A new insight that I have about
EXPONENTS is...

PAS and **PRE-TEST**



Quadratics

A quadratic equation is an equation of form:

$$ax^2 + bx + c = 0$$

that involves only two things besides numbers: a variable and a square of this variable.

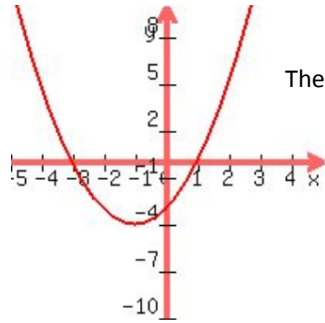
Examples:

Usually, quadratics are arranged so that the square part goes first, then the part with the variable, and some constant, equal to zero.

There are two ways of solving quadratics:

Factoring and **Quadratic formula**

Of these methods, the Quadratic Formula is the most reliable method that will give you the correct answer without guesswork.



The graph of a quadratic equation is a
PARABOLA

Summary:

Some new vocabulary words I will need to know for the _____ unit are....

Out:

Explain the difference between an equation that is linear and one that is quadratic.

Homework:

Watch the video about quadratics on the wiki.

Describe three new things that you learned while watching the video.